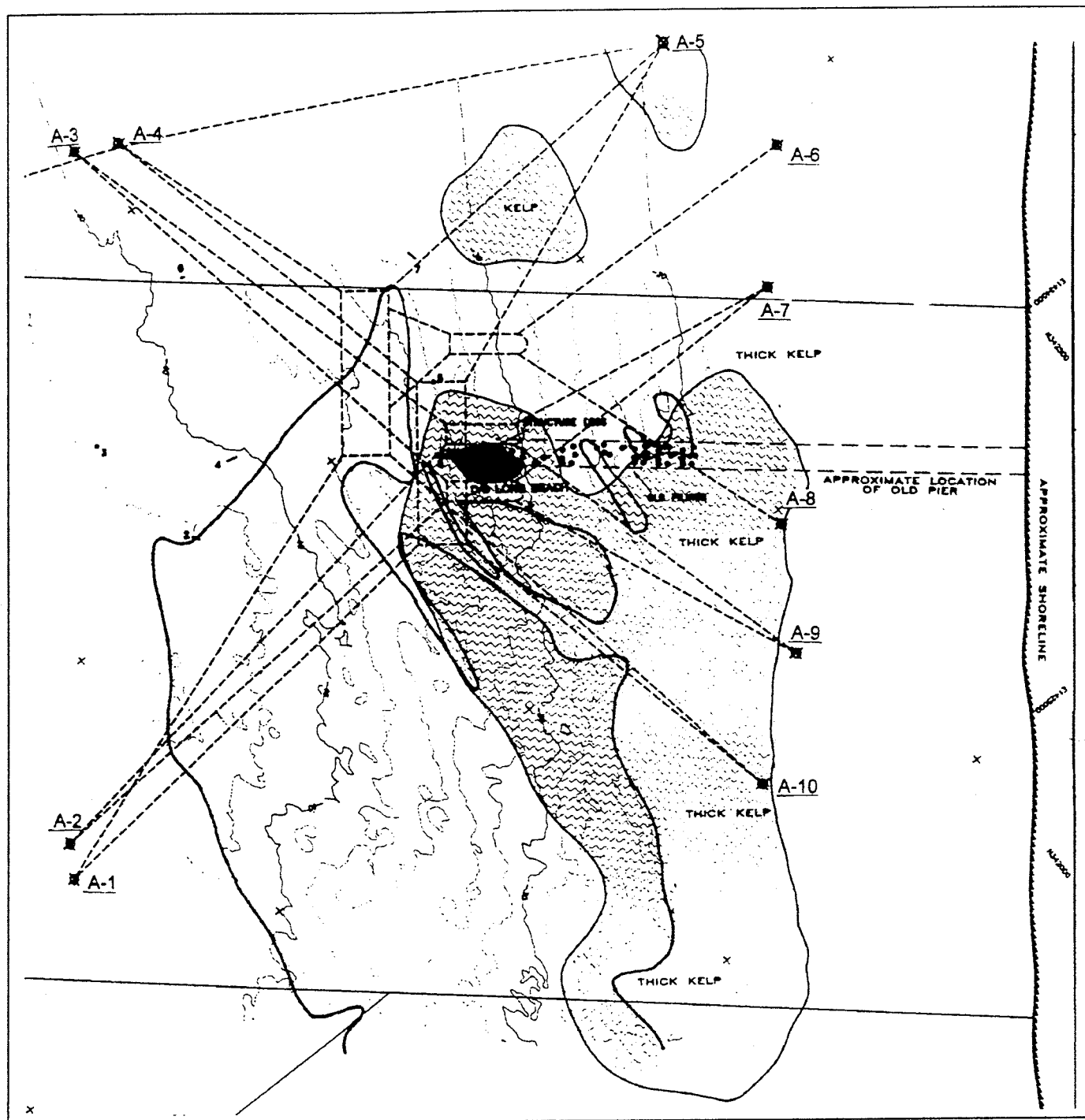


Figure 1
PROPOSED ANCHOR LOCATIONS AND SURFICIAL KELP AREA (MARCH 2001)



In March, April, and August 2001, diver-biologists surveyed and recorded the habitats and dominant macroepibiota and fish at each of the proposed anchor, along anchor line corridors, and at and around the remnant pier structure. The outer boundary of the surficial kelp was mapped during the March 2001 survey.

Based on the side scan sonar survey, and the presence of kelp, it was expected that rocky substrate extended offshore (south) and east of the exposed platform with isolated solid substrate inshore (north). Divers found that most of the rock was in water depths of 40 ft or less, and the thickest surface kelp was found in water depths of approximately 30 ft or less.

Diver-biologist observations indicated that the four offshore anchor locations (A-1 through A-4) are located in sediment; the other six locations comprised either exposed rock ridges or sand and boulder habitats. Along the offshore anchor corridors in water depths of 40 ft or less, the habitat is low (<0.5 ft) to moderately-high (3 ft) rock ledges. The rock substrate continued for most of the offshore anchor corridors with some sedimentary areas immediately offshore of the exposed pier-platform in water depths of approximately 30 ft. The habitat within along the six inshore anchor corridors comprises mixed sand and rock; the latter consisting of boulders and 1 to 3 ft-high exposed bedrock ridges. Common rock-associated algal taxa, that covered up to 50% of the low-relief ridges, included giant kelp (*Macrocystis* sp.), *Cystoseira osmundacea*, *Egregia laevigata*, and a red alga *Rhodomenia* sp.; coralline algal species were also present but not common. *Macrocystis* abundance was estimated to be 1 plant per 10 ft² (1 per 3 m²) within the nearshore anchor corridors where rock was present. Kelp abundance was substantially lower where boulders or lower-relief, sand-covered ridges were present. Other common epibiota included sea stars (*Pisaster brevispinis* and *P. giganteus*), and a solitary tunicate, *Styela montereyensis*. Table 1 summarizes the habitat and biota along the anchor corridors.

Table 1
HABITAT AND COMMON BIOTA AT ANCHOR LOCATIONS
AND ALONG ANCHOR LINE CORRIDORS

Anchor Corridor	Habitat and Dominant Epibiota
A-1 (short)	Sediment to 42 ft (<i>Diopatra</i> , <i>Kelletia</i> , and sea pens common; rock ridges with red and purple urchins (<i>Strongylocentrotus franciscanus</i> and <i>S. purpuratus</i>), <i>Kelletia</i> , <i>Parapholas</i> , and <i>Corynactis</i> common. One kelp bass (<i>Paralabrax clathratus</i>); sediment patch at 35 ft.
A-1 (long)	Sediment to 40 ft (same biota as above); rock ridges to 35 ft (<i>Macrocystis</i> [1 plant], <i>Pterogophora</i> , and <i>S. purpuratus</i> , common).
A-2 (short)	Sediment to 38 ft (same biota as A-1); rock ridges with sediment patches to 30 ft. Rock biota includes both species of urchins, <i>Lophogorgia</i> , and <i>Corynactis</i> common. Sea stars (<i>P. giganteus</i> , <i>P. brevispinus</i> , and <i>Asterina</i>) and tunicate (<i>Styela montereyensis</i>) common on inshore rock areas. <i>Macrocystis</i> common on rock from 32 to 30 ft only.
A-2 (long)	Sediment to 40 ft (same biota as A-1); low rock ridges with isolated higher ledges from 40 ft. Mixture of rock ridges and sediment to 28 ft. One "cut off" piling observed at 35 ft. Common rock epibiota includes: both <i>Pisaster</i> species, both urchin species, and tunicate (<i>Styela</i>). Colonial hydroid (<i>Aglaophenia struthionides</i>) present on inshore rocks.
A-3 (short)	Sediment to 38 ft (same biota as A-1); low rock ridges with some sediment. Both urchin species common. Two unidentified crabs (<i>Cancer</i> spp) at 35 ft. <i>Kelletia</i> common on rocks. No kelp observed.
A-3 (long)	Sediment to 35 ft (same biota as A-1); low rock ridges with <i>Macrocystis</i> and <i>Cystoseira</i> present to common to 35 ft. Urchins less abundant than on eastern transects.
A-4 (short)	Sediment to 38 ft. Rock ridges with kelp, both species of urchins common. Isolated sediment patches between rock ridges.
A-4 (long)	Sediment to 38 ft. Low relief rock ridges with isolated sediment patches to 35 ft. Common rock epibiota: kelp, <i>Cystoseira</i> , <i>Pterogophora</i> , and <i>Aglaophenia</i> . <i>Diopatra</i> common in sediment patches.
A-5 (long/short)	Low relief, sand-covered rock ridges grading into sand. Coralline algae present, <i>Cystoseira</i> and <i>Egregia</i> present to common; kelp abundance estimated at 1 plant per 25 ft ² .
A-6 (single)	Low-relief bedrock reef with 80% algae cover (<i>Cystoseira</i> , <i>Egregia</i> , and <i>Rhodomenia</i>) grading into sand and low relief, sand-covered reef. Kelp present but not common.
A-7 (long/short)	Sand-covered low-relief rock ridges, grading into sand and isolated rock ridges. <i>Diopatra</i> present in sand areas. Kelp abundance estimated at 1 plant per 25 ft ² .
A-8 (single)	Low relief, sand-covered ridges with isolated 1 to 3-ft high boulders. Turf red algal cover, <i>Cystoseira</i> present, <i>Rhodomenia</i> common. <i>Styela</i> and boring clams <i>Chaceia</i> present on rock ridges. Broken pilings found at offshore end of corridor transect.
A-9 (long/short)	Low-relief ridges with <i>Pisaster</i> and <i>Styela</i> present to common. Red alga (<i>Gigartina</i> sp.) present and kelp abundance estimated at 1 plant per 10 ft ² .
A-10 (long/short)	Sand and scattered 3 ft-high boulders grading into 3 ft-high rock ridges. Kelp common (1 plant per 10 ft ²) with <i>Egregia</i> , <i>Desmarestia</i> , and <i>Cystoseira</i> present to common. Algal cover 30 to 50% of rock ridges. <i>Pisaster brevispinis</i> present on sand-covered lower-relief rock ridges at offshore end of transect.

Anchors A-1 through A-4 are "offshore"; A-5 through A-10 are "inshore". See Figure 1 for anchor locations and anchor line corridors.

In general, diver observations confirmed the substrate types recorded during the 1999 side scan sonar survey. The rock substrate in the offshore areas is low to moderate-relief ridges; red and purple urchins (*S. franciscanus* and *S. purpuratus*) are particularly abundant on the rock ledges in the offshore areas. Kelp was present on most of the rocky substrate in water depths of 35 ft or less but was only abundant along the eastern offshore anchor line corridors. Two

other brown algal species (*Desmarestia* and *Cystoseira*) were also common, being most abundant in the shallower portions of the corridors. Sea stars *Pisaster giganteus*, *P. ochraceus*, and *Asterina* (= *Pateria*) *miniata*, and the red colonial gorgonian coral *Lophogorgia chilensis* were also present, but not abundant on the rocky substrate. Two kelp bass, *P. clathratus* were observed along the A-2 corridors. The habitat along the inshore anchor corridors is predominantly rock (low- to high-relief ridges and isolated boulders), although isolated sand patches are present in the eastern areas along the A-5, A-6, and A-7 corridors. Kelp is common to abundant with a maximum estimated abundance of 1 plant per 10 ft². Macroepibiota within the nearshore areas is similar to that found offshore, although urchins are less common and no gorgonian corals were observed there.

Platform: Diver-biologists surveyed and took still and video of the habitats, macrobiota, and fish associated with the eight concrete pilings and exposed steel, and seafloor at and around the remnant pier. The upper portions of the pilings supported relatively thick aggregations of mussels (*Mytilus* spp., see Plate 1) interspersed with the brown alga *Egregia* sp. and occasional kelp plants and anemones, including *Anthopleura* sp. The ochre sea star, *Pisaster ochraceus* is common on the mussel band. At approximately -10 ft, the *Mytilus* band is replaced with the strawberry anemone *Corynactis californica* and the tube-building mollusc *Serpulorbis squamigerus* that extend to the seafloor in approximately 33 ft of water. The feather duster worm, *Eudistylia* sp., was also present within this band. Around the base of the pilings is an area of shell talus comprising mostly *Mytilus* shells that supports a relatively abundant population of sea stars. The solitary tunicate *Styela montereyensis* is common to abundant on the lower portions of the pilings. Juvenile kelp plants were observed on the pilings and adult plants were present on the steel and isolated rocks around the bases of the pilings.

The pile-associated ichthyofauna comprises surf perches including the pile perch (*Damalichthys vacca*), black perch (*Embiotoca jacksoni*), and white perch (*Phanerodon furcatus*), sheephead (*Pimelometopon pulchrum*), and kelp bass (*Paralabrax clathratus*). Two species of rock fish (*Sebastes auriculatus* and *S. atrovirens*) were also observed on the shell talus. An estimated 50 individual fish were observed during the survey of the remnant pier.

Ex-Limital Observations: In addition to underwater surveys, observations on the pier-associated avifauna were also completed. During the March 2001 survey gulls, brown pelicans, western grebes, and cormorants were present to abundant on the structure. During the April 2001 survey, seven cormorant nests were observed on the top of the south and west-facing portions of the remnant pier (see Plates 2 and 3) and cliff swallow nests were observed on the steel under-support structures. Pigeons were also present on the pier during the April survey. Although gulls and cormorants were present to common during the August survey, no nests were observed and the swallows and pigeons were not observed.

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Plate 1
MUSSEL BAND IN UPPER INTERTIDAL PORTION OF PIER PILINGS

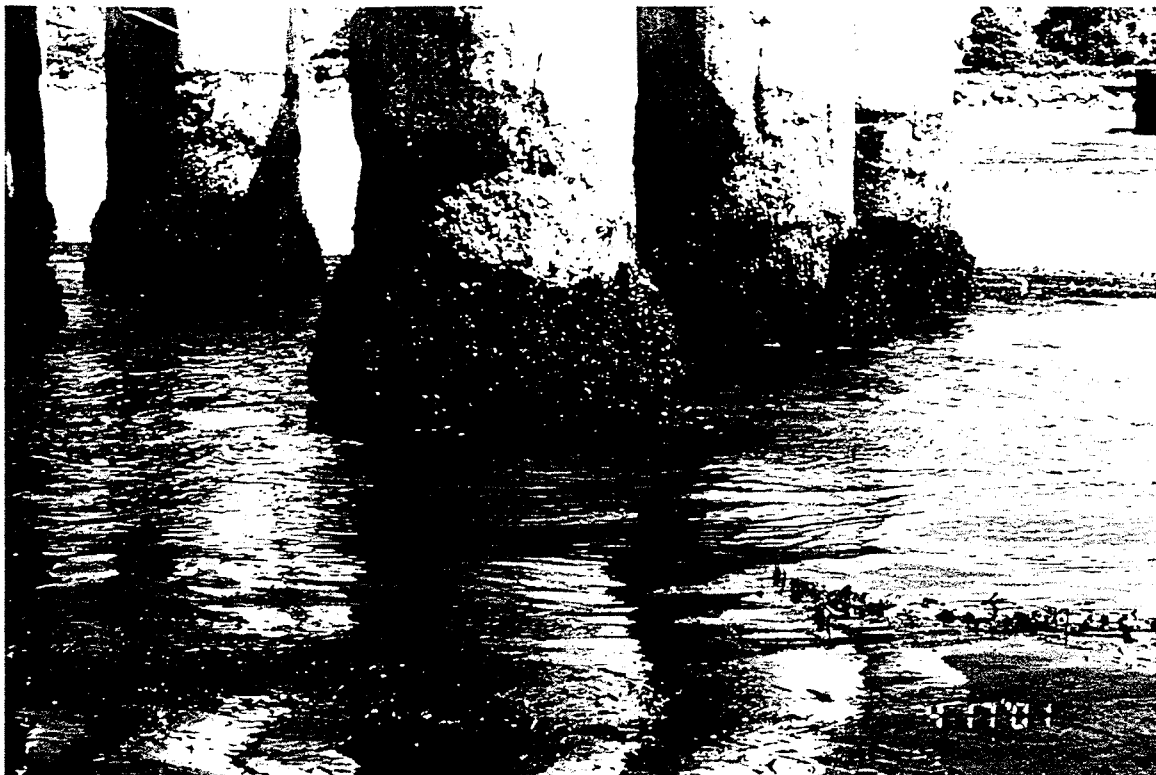


Plate 2
VIEW OF REMNANT PIER WITH NESTING CORMORANTS



Plate 3
CLOSE-UP OF NESTING CORMORANTS

